

## REMARKS

The Examiner maintained the rejection of claims 53-56 under 35 U.S.C. 102(e) as allegedly being unpatentable over U.S. Patent No. 5,595,885 to Stetler-Stevenson et al. ("the '885 patent") "in light of Clark et al." (Office Action, page 4). According to the Examiner, "Stetler-Stevenson et al. teach antibodies made to the CSC-21K/TIMP-2 metalloproteinase inhibitor protein in which specific peptide sequences/epitopes are described to make monoclonal antibodies . . ." (*Id.*) The Examiner further states: "In that hybridoma cells are first required to be made, in order to generate such monoclonal antibodies, the limitations of claim 56 are also reasonably met by the teachings of Stetler-Stevenson; absent evidence to the contrary." (*Id.*) Finally, the Examiner asserts that the '885 patent teaches the antibodies of claim 55 "comprising a detectable label" quoting the '885 patent as follows:

"CSC-21 . . . antibodies . . . are also useful in diagnosis of diseases characterized by abnormal balances of matrix metalloproteinase and associated inhibitor", in which "suitable immunoassays for CSC-21 could include anti-CSC-21 antibodies" and reasonably would be "tagged with suitable enzymatic, fluorescent or radioactive labels by means well known in the art."

(*Id.*, page 5).

Applicants respectfully traverse. The Board of Patent Appeals and Interferences ("the Board") recently held that Stetler-Stevenson et al. are not entitled to the March 21, 1989, filing date of Application No. 326,334 for the following count:

A purified and isolated human protein:

- I) which is a tissue inhibitor of metalloproteinases, wherein:
  - (a) the protein has a molecular weight of from about 20 to about 28 kilodaltons;

- (b) the protein forms a complex with the latent form of the 72-kilodalton type IV collagenase; and
- (c) the protein has an N-terminal amino acid sequence comprising

SPVHPQQAQFCNADVIRAKAVS; or

II) comprising the following amino acid sequence:

Cys Ser Cys Ser Pro Val His Pro Gln Gln Ala Phe Cys Asn Ala Asp Val Val Ile Arg Ala Lys Ala Val Ser Glu Lys Glu Val Asp Ser Gly Asn Asp Ile Tyr Gly Asn Pro Ile Lys Arg Ile Gln Tyr Glu Ile Lys Gln Ile Lys Met Phe Lys Gly Pro Glu Lys Asp Ile Glu Phe Ile Tyr Thr Ala Pro Ser Ser Ala Val Cys Gly Val Ser Leu Asp Val Gly Gly Lys Lys Glu Tyr Leu Ile Ala Gly Lys Ala Glu Gly Asp Gly Lys Met His Ile Thr Leu Cys Asp Phe Ile Val Pro Trp Asp Thr Leu Ser Thr Thr Gln Lys Lys Ser Leu Asn His Arg Tyr Gln Met Gly Cys Glu Cys Lys Ile Thr Arg Cys Pro Met Ile Pro Cys Tyr Ile Ser Ser Pro Asp Glu Cys Leu Trp Met Asp Trp Val Thr Glu Lys Asn Ile Asn Gly His Gln Ala Lys Phe Phe Ala Cys Ile Lys Arg Ser Asp Gly Ser Cys Ala Trp Tyr Arg Gly Ala Ala Pro Pro Lys Gln Glu Phe Leu Asp Ile Glu Asp Pro

See *Goldberg v. Langley et al. v. Stetler-Stevenson et al.*, Interference No. 102,711, Final Decision mailed June 17, 2003, at 26.<sup>1</sup> A copy of the Board's decision is attached for the Examiner's convenience.

Logically, if Stetler-Stevenson et al. is not entitled to the March 21, 1989, filing date of their first-filed patent application for isolated and purified TIMP-2 protein (the subject matter of the interference count), Stetler-Stevenson et al. could not be entitled to that filing date for an isolated and purified antibody that binds specifically to a polypeptide comprising an amino acid sequence of Figure 1 or Figure 2 in the instant application. (See Specification at 5, lines 20-24, explaining that Figures 1 and 2,

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<sup>1</sup> The Board's decision is non-precedential. Nevertheless, the decision is the law of the case.

respectively, present the cDNA and amino acid sequences of bovine and human metalloproteinase inhibitor, which is now called TIMP-2). For this reason, the '885 patent is not section 102(e) prior art to claims 53-56 and the rejection of those claims should be withdrawn.

Notwithstanding the Board's decision, however, the rejection of claims 53-56 under 35 U.S.C. § 102(e) cannot stand for the reasons of record. As applicants stated in the Amendment filed February 20, 2003, anticipation under 35 U.S.C. § 102 requires that "each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros., Inc. v. Union Oil Co.*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). If the reference does not expressly set forth a particular element of the claim, that reference still may anticipate if that element is "inherent" in its disclosure. To establish inherency, the Office must show "that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." *Continental Can Co. v. Monsanto Co.*, 20 U.S.P.Q.2d 1746, 1749 (Fed. Cir. 1991).

Here, the Examiner simply asserts that "Stetler-Stevenson et al. teach antibodies made to the CSC-21K/TIMP-2 metalloproteinase inhibitor protein in which specific peptide sequences/epitopes are described to make monoclonal antibodies . . ." (Office Action, page 4). Yet, the '885 patent never once uses the term "monoclonal antibody." Although Applicants noted this fact on page 7 of the Amendment filed February 20, 2003, the Examiner has responded with no evidence "that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." *Continental Can*, 20 U.S.P.Q.2d at 1749.

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The rejection of claim 54 as allegedly being anticipated by the '885 patent should be withdrawn.

Similarly, in rejecting claim 56, the Examiner states: "In that hybridoma cells are first required to be made, in order to generate such monoclonal antibodies, the limitations of claim 56 are also reasonably met by the teachings of Stetler-Stevenson; absent evidence to the contrary." (Office Action, page 4). Again, however, the '885 patent never uses the word "hybridoma." Moreover, the standard for anticipation is not that claim limitations be "reasonably met" by the prior art. Rather, the standard, as noted above, is that "each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros*, 2 U.S.P.Q.2d at 1053. The Examiner has not shown that the '885 patent either explicitly or inherently discloses a hybridoma cell according to claim 56, and the rejection of that claim under 35 U.S.C. 102(e) should be withdrawn.

In rejecting claim 55, the Examiner asserts that the '885 patent states:

"CSC-21 . . . antibodies . . . are also useful in diagnosis of diseases characterized by abnormal balances of matrix metalloproteinase and associated inhibitor", in which "suitable immunoassays for CSC-21 could include anti-CSC-21 antibodies" and reasonably would be "tagged with suitable enzymatic, fluorescent or radioactive labels by means well known in the art."

(Office Action, page 5). However, the crop-quoted portion of the '885 patent actually states:

Suitable immunoassays for CSC-21 or peptide domains of CSC-21 could include anti CSC-21 antibodies, reference CSC-21 antigen and solution or solid phase reactions.  
**Purified CSC-21 or peptide domains of CSC-21 can be tagged with suitable enzymatic, fluorescent or radioactive labels by means well known in the art.**

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Col. 16, lines 38-43 (emphasis added). Thus, it is TIMP-2 protein or TIMP-2 peptides that may "comprise a detectable label." The '885 patent discloses nothing about antibodies to TIMP-2 comprising detectable labels, and the rejection of claim 55 under 35 U.S.C. 102(e) should be withdrawn.<sup>2</sup>

Moreover, as stated in the Amendment filed February 20, 2003, Applicants invented the subject matter of claim 53 before the first filing date claimed on the face of the '885 patent. According to the Examiner, Applicants' Declaration Under 37 C.F.R. § 1.131 supporting their earlier invention was missing Exhibits 1-3 and was therefore defective. (Office Action, page 3). Applicants have attached a copy of the Declaration Under 37 C.F.R. § 1.131 including Exhibits 1-3, which was originally filed February 20, 2003. Applicants respectfully request that the Examiner call their representative (202-408-4185) should the Declaration and Exhibits again become separated. The Declaration shows that Applicants' invention of the subject matter recited by claim 53 predates the March 21, 1988, date claimed on the face of the '885 patent. For this reason, the '885 patent is not prior art to claim 53, and the rejection of claim 53 under 35 U.S.C. § 102(e) should be withdrawn.

Finally, because Interference No. 102,711 was decided in Applicants' favor, their Application No. 07/355,027 is no longer at the Board. Applicants respectfully request that the Examiner review the pending claims in that application to verify that they are not directed toward antibodies of metalloproteinase inhibitor products, as in the instant

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<sup>2</sup> Rejection of claim 55 under 35 U.S.C. § 102(e) over the combination of the '885 patent with Clark is improper. Anticipation requires that "each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros*, 2 U.S.P.Q.2d at 1053 (emphasis added).

application. (Office Action, page 3).

Applicants respectfully request that this Response under 37 C.F.R. § 1.116 be considered by the Examiner. Applicants respectfully request reconsideration and withdrawal of the section 102(e) rejection.

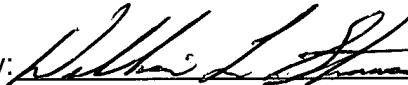
Applicants submit that is in condition for allowance. Applicants therefore request the Examiner's reconsideration and reexamination of the application, and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to Deposit Account No. 06-0916.

Respectfully submitted,

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GARRETT & DUNNER, L.L.P.

Dated: August 7, 2003

By:   
William L. Strauss  
Reg. No. 47,114

**Attachments:**

1. Declaration Under 37 C.F.R. § 1.131 of Keith E. Langley, Yves A. DeClerck, and Thomas C. Boone
2. Exhibits 1-3
3. Copy of Final Decision in Interference No. 102,711

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